

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 20953 (FIRST REVISION)

EXPIRATION DATE: 2024-05-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Triad National Security, LLC Los Alamos, NM

2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the transportation in commerce of low production lithium ion batteries contained in equipment (spacecraft) in non-specification packaging. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
- c. No party status will be granted to this special permit.
- d. This special permit serves as an approval under Special Provision A88 and State Variation US 3 of the ICAO TI and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.

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- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171- 180 and the ICAO TI.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.185(a)(1) in that low production lithium ion batteries have not passed the criteria in Part III, subsection 38.3 of the UN Manual of Tests and Criteria.
- 5. <u>BASIS</u>: This special permit is based on the application of Triad National Security, LLC dated April 13, 2020, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium ion batteries contained in equipment including lithium ion polymer batteries	9	UN3481	N/A

7. SAFETY CONTROL MEASURES:

a. OPERATIONAL CONTROLS:

- (1) Only low production lithium ion batteries contained in equipment (spacecraft) may be offered for transportation under the terms of this special permit. ("Low production" is defined as a production run of not more than 100 cells or batteries annually of a particular type.)
- (2) There must be no more than two batteries (a host and a payload) contained in equipment. A "host" battery is comprised of 26650 cells in a 1S3P configuration rated at 24.75 Wh and a "payload" battery is comprised of 26650 cells in a 3S1P configuration rated at 24.75 Wh contained in equipment as described in the October 3, 2019 application on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD).

- (3) The cells and the battery contained in equipment must be protected against short-circuiting and unintentional activation.
- (4) The battery contained in equipment must be equipped with an effective means of preventing dangerous reverse current flow for cells that are connected in parallel.

b. TESTING:

- (1) Cells must be of a type that has been successfully tested in accordance with the UN Manual of Tests and Criteria, Sixth Revised Edition.
- (2) The lithium battery contained in equipment must have passed testing including T-1, T-2, T-3, and T-4 tests as described in the application dated October 3, 2019 and on file with OHMSAPD.

c. PACKAGING:

- (1) The batteries must be contained in equipment structurally designed for space launch application.
- (2) Both batteries must have a strong metal housing within the equipment.
- (3) The equipment containing the batteries must be individually wrapped in an electrostatic bag.
- (4) The wrapped equipment containing the batteries must be placed in a cushioned 1610 Pelican plastic 4H2 box that meets the Packing Group I performance level.
- (5) Appropriate measures must be taken to prevent movement of the equipment within the case that may lead to damage and a dangerous condition during transport.
- (6) The net weight of batteries within each package must not exceed 12 kg (27 pounds).
- d. MARKING REQUIREMENTS: Each package, and overpack if used, prepared under the provisions of this special permit must be plainly marked with the special permit number: DOT-SP 20953.

8. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).
- b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit, the HMR, and the ICAO TI.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. This special permit in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of origin, transit, and destination.
- e. The grantee must maintain the following record and upon request make this record available to a DOT representative or an enforcement official. The record to be maintained is as follows:
 - (1) Dates of shipment; and
 - (2) Description of each type of shipment.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Cargo-only aircraft.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq:</u>

- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 $\underline{\text{et seq.}}$, when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of

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this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover

Ryan J Vist

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp app/special permits/spec perm index.htm
Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Steve H/NICKS